V0.19 Wednesday, 30 September 2009

# 2009 Global Organization for Earth System Science Portal (GO-ESSP) Workshop Agenda

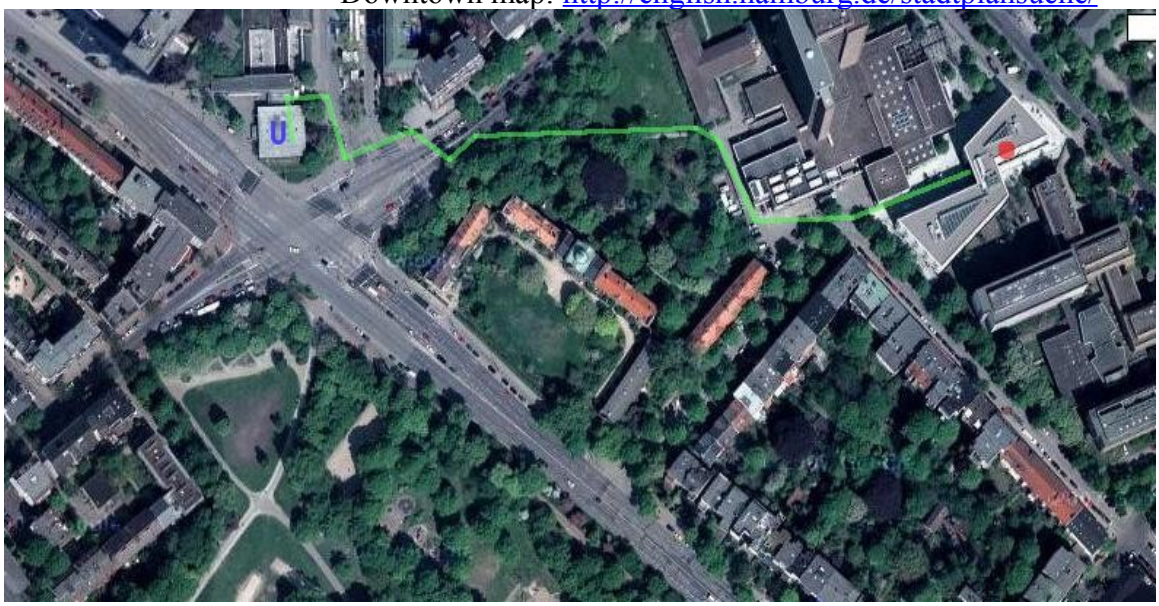
**Date:** October 6th – 8th, 2009
**Location:** ZMAW Building, Bundesstraße 53, 20146 Hamburg.
http://www.mpimet.mpg.de/en/institut/besucherinformationen.html
**Room:** No. 22/23, ground floor
Size: 70 people, Room Orientation: Theatre Style
Audio/Video: Digital Projector and Microphone

**Arrival Time:** *Participants should plan to arrive between **8:30 – 9:00 AM***.
Note: For administrative reasons there will be no breakfast during the event, so please have breakfast before attending the workshop.

**Hotels:** Hotels in the vicinity of the venue.
http://www.mpimet.mpg.de/en/institut/besucherinformationen/hotelliste.html

**Transport:** Transportation: see details here
http://www.mpimet.mpg.de/en/institut/besucherinformationen.html
Hamburg buses and undergrounds subways are operated by Hamburger Verkehrsverbund (HVV)
http://www.hvv.de/en/
General Visitor Information:

- http://english.hamburg.de/tourist-information/
- http://english.hamburg.de/attractions-hamburg/
- http://en.wikipedia.org/wiki/Hamburg
- http://wikitravel.org/en/Hamburg
- Downtown map: http://english.hamburg.de/stadtplansuche/




*The way from Underground "Schlump" to the z-shaped ZMAW building.*

*(The DKRZ building is the T-shaped one at the middle top).*

Teleconferencing: GO-ESSP is primarily an in-person event. For those that cannot attend we have, however, established some level of videoconferencing capabilities. The virtual conference room will be for the video part at:

http://webconf.vc.dfn.de/go-essp

This connection probably also will have an audio channel. However, as this often has poor sound quality, we will set up a phone conference in parallel:

To establish a sound connection by phone dial one of the DFN numbers: +49 30 254 1080

You then will be asked to enter the Conference ID followed by a hash ("#"), which is: 9792 0390 # . You then enter the virtual conference room.

**Purpose:** The Global Organization for Earth System Science Portals (GO-ESSP) workshop, organized by an consortium spanning continents, countries, and intergovernmental agencies, will facilitate understanding, organization, and implementation of a global infrastructure for data sharing. This GO-ESSP consortium envisions an environment that allows users open access to petabytes of model-generated, satellite, and in-situ data including physical, biogeochemical and ecosystem content. This infrastructure will bring to life a synchronized federation that supports fusion of models and observations, GIS integration, model inter-comparison capabilities, user support and dataset life cycle maintenance, as well as a full suite of server-side analysis tools and integration with desktop productivity applications.

As a step towards fulfilling this global infrastructure—anticipating the requirements of the Coupled Model Intercomparison Project, Phase 5 (CMIP5) multi-model experiment—participants of GO-ESSP are implementing a distributed testbed. CMIP5 is expected to provide a foundation for the next assessment report by the Intergovernmental Panel on Climate Change (IPCC). Although driven by the immediate needs of CMIP5, the workshop focus will encompass broader data management issues that are faced by large climate and weather research activities. Participants of the workshop will share ideas and software promoting integrating activities that facilitate the community's goal to build a science gateway to climate data and resources.

This workshop will focused on the following themes:

- Metadata conventions and their evolution, including the Climate and

Forecast (CF) conventions and the Gridspec
- Metadata collection and generation strategies
- Federation of services
- Remote processing and interaction
- Workspaces, workflows and automation in semantically enabled environments
- New initiatives and partner projects
- New strategies and technology developments

# Agenda

The focus of this workshop will be to bring together technologists and scientists interested in leveraging emerging technologies and solutions to support, enable and enhance climate research. Of particular interest are individuals who are building infrastructures and tools to support analysis and sharing of both climate model output and observations.

## Day 1: CF Conventions and Grids

### Session One: General CF Issues

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|---|---|---|---|
| 08:30 – 09:00 | Arrival Time | Michael Lautenschlager (Host) | 30 min |
| 09:00 – 09:05 | Welcome and Logistics | Michael Lautenschlager (MPIM) | 5 min |
| 09:05 – 09:20 | CF Governance and Overview | Bryan Lawrence (BADC), Karl Taylor (PCMDI) | 15min |
| 09:25 – 09:40 | CF Common Concept | Alison Pamment (BADC) | 15 min |
| 09:45 – 10:00 | Vocabulary Services for CF Standard Names | Roy Lowry (BODC) | 15 min |
| 10:05 – 10:20 | CF Conventions for Observational Data | John Caron (Unidata) | 15 min |
| 10:25 – 10:40 | Developments in the libCF Library from Unidata | Ed Hartnett (Unidata) | 15 min |
| 10:45 – 11:00 | **BREAK** | | 15 min |
| 11:00 – 11:15 | NetCDF RAF | Janine Goldstein (NCAR) | 15 min |
| 11:20 – 11:35 | Report from OceanObs09: Opportunities and challenges for the emerging framework of netCDF-CF-THREDDS-DAP | Steve Hankin | 15 min |
| 11:40 – 11:55 | ADAGUC: CF netCDF and OGC services | John van der Vegte | 15 min |
| 12:00– 12:15 | A Draft Standard for the CF Conventions | Russ Rew (Unidata) | 15 min |
| 12:20 – 13:30 | **LUNCH** | | 70 min |
| 13:30 – 13:45 | Grids Theme Overview | V. Balaji (GFDL) | 15 min |
| 13:45 – 14:00 | Fast Regridding of Complex Grids for Visualization | Jon Blower | 15 min |
| 14:00 – 14:15 | Global Cloud-Resolving Model (GCRM) Grid | Karen Schuchardt (PNNL) Todd Elsethagen | 15 min |
| 14:15 – 14:30 | **BREAK** | | 15 min |
| 14:30 – 15:30 | **General CF Discussion** | | 60 min |

### Session Two: Demonstrations

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|---|---|---|
| 15:30 – 17:30 | | 2 hr |

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|---|---|---|
| 15:50 – 16:05 | | |
| 17:30 – 17:35 | **Closing Comments and Adjourn Day 1** | 5 min |

**Day 2: CMIP5**
**Session One: Contributing Data and Metadata for CMIP5**

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|---|---|---|---|
| 08:45 – 09:15 | Arrival Time | Michael Lautenschlager (Host) | 30 min |
| 09:15 – 09:35 | CMIP5 Overview | Karl Taylor, Dean N. Williams (PCMDI) | 20 min |
| 09:35 – 09:55 | The Current Status of CF Standard Names for CMIP5 | Alison Pamment (BADC) | 20 min |
| 09:55 – 10:15 | Climate model Output Rewriter (CMOR) 2 | Karl Taylor, Dean N. Williams (PCMDI) | 20 min |
| 10:15 – 10:35 | Model and Simulation Metadata Questionnaire | Bryan Lawrence (BADC) | 20 min |
| 10:35 – 11:00 | **BREAK** | | 25 min |

**Session Two: The ESG Federation**

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|---|---|---|---|
| 11:00 – 11:30 | An Introduction to the ESG-CET CMIP5 Federation | Luca Cinquini (NCAR) | 30 min |
| 11:30 – 11:50 | ESG Data Node Configuration | Bob Drach, Dean N. Williams (PCMDI) | 20 min |
| 11:50 – 12:10 | Implementation of CMIP5 Model Metadata in ESG | Cecelia DeLuca and Sylivia Murphy (NOAA) | 20 min |
| 12:10 – 12:30 | Adding Secure Services to ESG | Phil Kershaw (BADC) | 20 min |
| 12:30 – 13:50 | **LUNCH** | | 80 min |

**Session Three: Exploiting CMIP5 and ESG**

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|---|---|---|---|
| 13:50 – 14:10 | Remote Processing Issues | Steve Hankin (PMEL) | 20 min |
| 14:10 – 14:30 | Model Inter-comparison Using the LAS Interactive Earth Science Data Visualization Gallery (vizGal) | Roland Schweitzer (PMEL) | 20 min |
| 14:30 – 14:50 | The Australian Climate Supernode | Ben Evans, Pauline Mak (ANU) | 20 min |
| 14:50 – 15:10 | Parallel Analysis Tools for use in IS-ENES and Exploiting CMIP5 | Barcelona Group | 20 min |
| 15:10 – 15:25 | **BREAK** | | 15 min |
| 15:25 – 15:45 | The Climate Data Exchange (CDX) | Amy Braverman (NASA-JPL) | 20 min |

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|---|---|---|---|
| 15:45 – 16:05 | The CMIP5 archive in AR5 | Michael Lautenschlager (MPIM) | 20 min |
| 16:05 – 16:25 | The ENSEMBLES downscaling portal: A user-friendly GRID-based tool for GCM postprocessing and downscaling<br>) | Jose Gutiérrez Santander Meteorology Group at IFCA (CSIC-Universidad de Cantabria) | 20 min |
| 16:25 – 17:25 | CMIP5 & ESG Discussion | | 60 min |
| 17:25 – 17:30 | **Closing Comments and Adjourn Day 2** | | 5 min |
| 18:30 – 21:00 | **Workshop Dinner (TBD)** | | 2-3 hrs |

**Day 3: GO-ESSP relevant technologies and projects**

**Session One: Partner Projects**

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|---|---|---|---|
| 08:45 – 09:15 | Arrival Time | Michael Lautenschlager (Host) | 30 min |
| 09:15 – 09:35 | METAFOR | Gerard Devine (University of Reading) | 20 min |
| 09:35 – 09:55 | Curator and Curator2: Commodity Governance in Scientific Portals | Cecelia, Balaji, Sylvia, Paul Edwards, Mark Ackerman (ESC) | 20 min |
| 09:55 – 10:15 | The UK Climate Projections User Interface | Stephen Pascoe (BADC) | 20 min |
| 10:15 – 10:35 | A Grid Enabled Scientific Gateway for Climate Change | Giovanni Aloisio, Sandro Fiore (CMCC) | 20 min |
| 10:35 – 10:55 | IS-ENES, C3Grid, and DKRZ Data Node | Stephan Kindermann (DKRZ) | 20 min |
| 10:55 – 11:20 | **BREAK** | | 25 min |

**Session Two: Partner Projects, continued**

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|---|---|---|---|
| 11:20 – 11:40 | NOAA Environmental Software Infrastructure and Interoperability Program (NESII) | Cecelia DeLuca and V. Balaji (ESC) | 20 min |
| 11:40 – 12:00 | The National Operational Model Archive and Distribution System (NOMADS) | Glenn Rutledge (NOAA/NCDC) Glenn Rutledge (NOAA/NCDC) | 20 min |
| 12:00 – 12:20 | IPCC AR5: new demands, challenges and responds. | V.Balaji, Y. Malysheva, S.Nikonov, C.Rehbein (GFDL) | 20 min |
| 12:20 – 12:40 | Distributing climate model data to the world - a 10-year retrospective | Gary Strand | 20 min |
| 12:40 | **MEETING ADJOURN** | | |
| | **Steering Committee Working Lunch (2 Hours)**<br>**15.00: Steering Committee Adjourn** | | |